



CORRESPONDENCE

Re: Dacron or ePTFE for Femoro-popliteal Above-Knee Bypass Grafting: Short- and Long-term Results of a Multicentre Randomised Trial, van Det et al. in *Eur J Vasc Endovasc Surg* (2009) 37, 457–463

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Dear Sir,

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I read with interest the paper by the above authors that challenges the more conventional use of ePTFE for prosthetic above-knee femoropopliteal bypasses. A few issues arise: firstly, the use of grafts of 6 mm diameter when an 8 mm graft is an option, which is not an unconventional one. The authors have also ignored the issue of heparin-bonded ePTFE grafts such as the Gore Propaten vascular graft in the discussion, which has demonstrated 84% and 91% 1-year primary patency rates,^{1,2} which is also supported on a haematological basis.³ This is particularly interesting given the study was also funded by Gore. Again, this issue was not looked at in reference 13 of their paper, which was powered for non-inferiority of Dacron as compared to ePTFE.

It is quite possible that once 8 mm grafts are used, the increase in flow rates, which would be about 1.8-fold based on the steady flow equation (notwithstanding the non-Newtonian flow characteristics) would influence patency rates, as would heparin-binding onto the ePTFE graft. Given the time of the study (1992–96) and the changes in the heparin-bonding technology it may be that the results of this no doubt detailed study are already redundant. It would be interesting to see what more contemporary studies in a similar format would show when using the Gore Propaten graft.

References

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- 2 Walluscheck KP, Bierkandt S, Brandt M, Cremer J. Infrainguinal ePTFE vascular graft with bioactive surface heparin bonding. First clinical results. *J Cardiovasc Surg (Torino)* 2005;46(4):425–30.
- 3 Heyligers JM, Verhagen HJ, Rotmans JI, Weeterings C, de Groot PG, Lisman T. Heparin immobilization reduces thrombogenicity of small-caliber expanded polytetrafluoroethylene grafts. *J Vasc Surg* 2006;43(3):587–91.

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Response to Letter to Editor

Dear Sir,

We would like to thank Dr Chaudhuri for his in-depth response on our recent publication “Dacron or ePTFE for femoro-popliteal above-knee bypass grafting: short and long-term results of a multicentre randomised trial.” *Eur J Vasc Endovasc Surg* 2009; 37: 457–463.

Indeed it was mentioned that the patency rates with large-caliber prosthetic grafts in the fem-distal position (8 mm instead of 6 mm) were maybe better.^{1,2} Unfortunately all these studies were flawed by nonrandomised design and potential selection bias. There is no level 1 evidence which clearly showed the better results of 8 mm prostheses in the femoro-distal position.

We agree that new graft technologies might give better results compared to both, the standard Dacron and ePTFE, we used in our study. The older vascular surgeons remembered the “strong expert opinion” that patency rates with PTFE femoro-popliteal bypass above and below the knee were equal to or better than those with the same operation performed with saphenous vein.³ This “evidence” was the background of our prospective RCT which clearly showed the opposite of the opinion of the experts in the 80th. Our group was also involved in the prospective non-consecutive cohort study of the Gore–Tex Propaten Vascular Graft in the femoro-distal position. The design of this study lodged all the potential risks of bias.⁴